REMARKS

In response to the Final Office Action mailed June 15, 2006, Applicants respectfully request entry of this Amendment and reconsideration of the application.

To further the prosecution of this application, each of the rejections presented in the Office Action is responded to below, amendments have been made in the claims, and claim 26 has been cancelled without prejudice or disclaimer. No new matter has been added. The claims as presented are believed to be in condition for allowance.

I. The Finality of the Office Action is Premature under MPEP §706.07(a)

Applicants respectfully assert that the finality of the Office Action is premature under MPEP §706.07(a).

Specifically, section 706.07(a) states that "second or any subsequent actions on the merits shall be final, except where the examiner introduces a new ground of rejection that is neither necessitated by applicant's amendment of the claims nor based on information submitted in an information disclosure statement."

The Office Action asserts that Applicant's amendments to the claims in response to the previous Office Action (mailed on March 29, 2006) necessitated the introduction of the new grounds for rejection set forth in the present Office Action. However, at least with respect to independent claim 11, Applicants amendments did not necessitate the new ground for rejection. The same section of the MPEP cited in the Office Action (i.e., § 706.07(a)) states:

> When applying any 35 U.S.C. **102**(e)/ **103** references against the claims of an application, the examiner should anticipate that a statement averring common ownership at the time the invention was made may disqualify any patent or application applied in a rejection under 35 U.S.C. **103** based on 35 U.S.C. **102**(e). If such a statement is filed in reply to the 35 U.S.C. **102**(e)/ **103** rejection and the claims are not amended, the examiner may not make the next Office action final if a new rejection is made. See MPEP § **706.02**(l)(3). (emphasis added.)

Claim 11 was not amended in response to the prior Office Action, and a statement averring to common ownership was made. In response, a new rejection was made in the outstanding Office Action. In this situation, the MPEP specifically prohibits making the next Office Action final.

Further, although some claims were amended in response to the last Office Action, the MPEP makes clear that *any* new rejection not necessitated by Applicants' amendment precludes the issuance of a subsequent final rejection. Specifically, MPEP § 706.07(a) states:

> Furthermore, a second or any subsequent action on the merits in any application or patent undergoing reexamination proceedings will not be made final if it includes a rejection, on newly cited art, ... of any claim not amended by applicant or patent owner in spite of the fact that other claims may have been amended to require newly cited art. (emphasis added).

In view of the foregoing, the finality of the rejection is believed to be premature, and withdrawal of the finality of the rejection is respectfully requested.

II. Request for Telephone Conference with the Examiner

Applicants' representative, Melissa A. Beede, contacted the Examiner to schedule a telephone conference to discuss the finality of the Office Action, as well as proposed claim amendments and arguments. However, the Examiner indicated that she would not grant an interview because the Office Action was Final, and that prosecution was therefore closed.

Applicants believe the finality of the Office Action is improper, as indicated above. Accordingly, Applicants respectfully request that if, after considering Applicants' remarks, the Examiner withdraws the finality of the present Office Action, the Examiner contact Applicants' representative to schedule a telephone conference in advance of issuing a further Office Action on the merits. It is believed that a telephone conference would be helpful in expediting prosecution of the application. The Examiner's cooperation in this regard is appreciated.

III. Rejections of Independent Claim 1

Independent claim 1 was rejected under 35 U.S.C. §102(b) as being anticipated by Matschke (U.S. Patent No. 5,498,394). This rejection is respectfully traversed.

a. Amendments to Claim 1

Claim 1 has amended to further distinguish over the cited reference. Applicants do not accede to the appropriateness of the rejection of this claim, and have amended the claim solely to advance the prosecution of the application.

In particular, claim 1 has been amended to recite "a light seal detector, triggered when the light seal detector has ***directly*** detected completion of the light seal to a certain degree." This language is supported in the application as filed, e.g., a page 9, lines 4-17.

b. Rejection over Matschke

Initially, Applicants reiterate that the light detector of Matschke does not detect completion of a light seal to a certain degree. In this respect, Applicants note that the light detector of Matschke would provide the same output in the following two scenarios:

(1) Hands interrupt the light path 8, and also contribute to the light seal of the upper member 11.

(2) A mug left in the chamber interrupts the light path 8, and has no effect on the light seal of the upper member 11.

Thus, it is clear that the light detector has no ability to detect completion of a light seal to a certain degree, because the output of the light detector is independent of whether there is any completion of the light seal.

However, to advance the prosecution of the application, Applicants have amended claim 1 to recite a light seal detector, triggered when the light seal detector has directly detected completion of the light seal to a certain degree. The Office Action states that "the photoelectric momentary switch of Matschke is a light sensor that is triggered only when it has detected completion of the light seal to a certain degree, albeit indirectly" (Office Action at page 9). Accordingly, the Office Action

concedes that the light sensor in Matschke does not directly detect completion of a light seal to a certain degree.

In view of the foregoing, Matschke does not anticipate claim 1. Withdrawal of this rejection is therefore respectfully requested. Claims 2-5 depend from claim 1 and are allowable over Matschke for at least the same reasons as the independent claim.

IV. Rejection of Independent Claim 11

Independent claim 11 was rejected under 35 U.S.C. §103 as being obvious over Brandt (U.S. Patent No. 6,132,784) in view of Clark (U.S. Patent No. 5,786,598). This rejection is respectfully traversed.

Claim 11 recites a sterilizer/disinfector, comprising: a housing; a flash lamp disposed within the housing; and ***one or more vanes*** each attached to the housing at a pivot point and rotatable about the pivot point, ***for actuating the flash lamp*** and blocking light emitted by the flash lamp from exiting the housing.

The Office Action relies on Brandt for the teaching of "one or more vanes... for actuating the flash lamp," citing doors 36. However, the UV light source 18 of Brandt is not actuated *by the doors 36*. Indeed, the Office Action does not appear to allege that Brandt teaches this feature.

In view of the foregoing, withdrawal of this rejection is respectfully requested. Claim 12 depends from claim 11 and is allowable for at least the same reasons as the independent claim.

V. Rejection of Independent Claim 18

Independent claim 18 was rejected under 35 U.S.C. §102(b) as being anticipated by Bourque (U.S. Patent No. 5,127,521). In addition, independent claim 18 was rejected under 35 U.S.C. §102(b) as being anticipated by Sakurai (U.S. Patent No. 4,772,795).

a. Amendments to Claim 18

Claim 18 has been amended to clearly distinguish over Sakurai. As amended, claim 18 recites a sterilizer/disinfector for sterilizing or disinfecting an object, comprising: a housing; and

two or more vanes pivotally mounted to the housing, wherein a first vane of the two or more vanes comprises a first notch and a second vane of the two or more vanes comprises a second notch; wherein the vanes are constructed and arranged such that when the first vane is moved in a clockwise direction and the second vane is moved in a counterclockwise direction, the vanes are moved into a position in which at least the first and second notches adjoin to form a light-tight seal around the object during sterilization or disinfection.

The amendments to claim 18 are supported e.g., at page 8, lines 12-26 and Figures 2-5 of the specification as filed.

b. Rejection over Bourque

Bourque does not disclose or suggest vanes "constructed and arranged such that when the first vane is moved in a clockwise direction and the second vane is moved in a counterclockwise direction, the vanes are moved into a position in which at least the first and second notches adjoin to form a light-tight seal around the object during sterilization or disinfection," as recited in claim 18.

Accordingly, claim 18 is not anticipated by Bourque and withdrawal of this rejection is respectfully requested.

c. Rejection over Sakurai

Sakurai also does not disclose or suggest vanes "constructed and arranged such that when the first vane is moved in a clockwise direction and the second vane is moved in a counterclockwise direction, the vanes are moved into a position in which at least the first and second notches adjoin to form a light-tight seal around the object during sterilization or disinfection." In particular, the blades 9 of Sakurai all move in the same direction (clockwise) to reduce the size of the insertion area 10.

Accordingly, claim 18 is not anticipated by Sakurai and withdrawal of this rejection is respectfully requested.

VI. Rejection of Independent Claim 23

Independent claim 23 was rejected under 35 U.S.C. §103(a) as being obvious over Sakurai in view of Harper (U.S. Patent No. 5,794,410). This rejection is respectfully traversed.

As discussed below, Harper is not analogous prior art, either with respect to Sakurai or to the subject matter of claim 23. Further, there is simply no motivation to combine the references because the proposed modification of Sakurai would render the sterilizer of Sakurai unfit for its intended purpose.

a. Harper is not analogous prior art.

To rely on a reference under 35 U.S.C. § 103, it must be analogous prior art. Harper is not analogous prior art, either with respect to Sakurai or to the subject matter of Applicants' claim.

MPEP § 2141.01(a) states that "to rely on a reference under 35 U.S.C. 103, it must be analogous prior art," and that "in order to rely on a reference as a basis for rejection...the reference must either be in the field of Applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the inventor was concerned." *In re Oetiker*, 977 F.2d 1443, 1446, 24 USPQ2d 1443, 1445 (Fed. Cir. 1992). See also *In re Deminski*, 796 F.2d 436, 230 USPQ 313 (Fed. Cir. 1986); *In re Clay*, 966 F.2d 656, 659, 23 USPQ2d 1058, 1060-61 (Fed. Cir. 1992). MPEP 2142.01(a) also states that "a reference is reasonably pertinent if, even though it may be in a different field from that of the inventor's endeavor, it is one which, because of the matter with which it deals, logically would have commended itself to an inventor's attention in considering his problem." *Wang Laboratories Inc. v. Toshiba Corp.*, 993 F.2d 858, 26 USPQ2d 1767 (Fed. Cir. 1993); and *State Contracting & Eng'g Corp. v. Condotte America, Inc.*, 346 F.3d 1057, 1069, 68 USPQ2d 1481, 1490 (Fed. Cir. 2003) (where the general scope of a reference is outside the pertinent field of endeavor, the reference may be considered analogous art if subject matter disclosed therein is relevant to the particular problem with which the inventor is involved).

Harper is directed to a method and apparatus for wrapping spherical objects (e.g., lettuce) with a thermoplastic film (Abstract). An iris diaphragm 20 is used to gather the film tightly once the lettuce has been wrapped with the film (col. 7, lines 11-15).

Harper is completely unrelated to the subject matter of Sukurai. While Sakurai is directed to a UV-sterilizer for a dental implement, ***there is no discussion in Harper of sterilization of any sort.*** Indeed, even the iris diaphragm 20 of Harper, cited in the Office Action, has a completely different function than the gate mechanism 8 of Sukurai. The iris diaphragm 20 of Harper is used to gather film that has been wrapped around lettuce. In contrast, the gate mechanism 8 of Sukurai is used to form a light seal around a cord of a dental implement to prevent leakage of the UV-rays from the interior of a housing (Sakurai at col. 4, lines 35-40).

Further, Harper is completely unrelated to the subject matter of Applicants' claim 23. Claim 23 relates to a device having an ultraviolet light source that emits ultraviolet radiation to sterilize or disinfect an object placed at least partially within a housing when a movable member is in a closed position and a detector detects some other parameter. Harper does not relate to sterilization or disinfection, and does not deal with any problem pertinent to this objective.

Thus, Harper is not analogous prior art pursuant to MPEP § 2141.01(a), either with respect to Sakurai or to the subject matter of Applicants' claim. Accordingly, the rejection of claim 23 under 35 U.S.C. § 103 in view of Sakurai and Harper is improper and should be withdrawn.

b. The proposed modification of Sakurai would render the sterilizer of Sakurai unfit for its intended purpose.

The Office Action proposes replacing the manual gate closure mechanism of Sakurai with the automated iris diaphragm closure mechanism of Harper. However, doing so would render the apparatus of Sakurai unfit for its intended purpose. Accordingly, there is no motivation for the combination of Sakurai and Harper.

First, the iris diaphragm of Harper closes at regular intervals, and not in response to the detection of the presence of an object. If the manual gate closure mechanism of Sakurai were substituted for the automatic iris diaphragm closure mechanism of Harper, the gate mechanism 8 of Sakurai would no longer be able to be activated on demand (i.e., at a selected desired time). Activating the gate mechanism on-demand is critical in a non-automated process like that of Sakurai. If the manual gate closure mechanism of Sakurai were substituted for the automated diaphragm closure mechanism of Harper, an operator could not open and close the gate mechanism when desired to introduce and remove the dental implement.

Second, Harper provides no mechanism to automatically control the size of the opening of the diaphragm. Sakurai teaches that providing such control is critical, because is allows the light seal to be adapted for objects of varying sizes. The manual gate closure mechanism of Sakurai achieves this objective by allowing an operator to judge the size of the object and form the light seal accordingly. If the automated diaphragm closure mechanism of Harper were substituted for the manual gate closure mechanism of Sakurai, this critical function of controlling the size of the opening based on the size of the object would be lost, and the light seal would not be formed properly.

Accordingly, replacing the manual gate closure mechanism of Sakurai with the automated iris diaphragm closure mechanism of Harper would render the apparatus of Sakurai unfit for its intended purpose. Accordingly, there is no motivation for the combination of Sakurai and Harper. Thus, a *prima facie* case of obviousness has not been established.

In view of the foregoing, the rejection of claim 23 is improper, and should be withdrawn.

VII. Rejection of Dependent Claim 24

Dependent claim 24 was also rejected under 35 U.S.C. §103(a) as being obvious over Sakurai in view of Harper. This rejection is respectfully traversed.

Claim 24 recites: " wherein the movable member is constructed and arranged to move to the closed position in response to an object moving against the movable member as the movable member is moved to the closed position." However, neither Sakurai nor Harper teaches or suggests this feature.

In Sakurai, the gate mechanism moves to a closed position in response to a lever 12a being operated (col. 3, lines 46-68). In Harper, the iris diaphragm moves to a closed position at a regular interval, after the object 16 (e.g., lettuce) has moved below the iris diaphragm (col. 6, lines 62 – col. 7, line 3). The lettuce never moves against the iris diaphragm; rather, it moves through an opening in the diaphragm.

In view of the foregoing, and the dependence of claim 24 on claim 23, withdrawal of the rejection of claim 24 is respectfully requested.

VIII. Rejection of Independent Claim 25

Independent claim 25 was rejected under 35 U.S.C. §103(a) as being obvious over Sakurai in view of Matschke. Claim 25 has been amended to more clearly distinguish over the references.

a. Amendments to Claim 25

Claim 25 has been amended to recite at least one movable member movable between an open position and a closed position, "wherein the at least one movable member is constructed and arranged to move between the open position and the closed position in response to the object exerting a force on the at least one movable member when the object is at least received within the opening." This language is supported in the application as filed, e.g., at page 8, lines 12-22.

b. Rejection over Sakurai in View of Matschke

The combination of Sakurai and Matschke does not teach or suggest "at least one movable member movable between an open position and a closed position, wherein the at least one movable member is constructed and arranged to move between the open position and the closed position in response to the object exerting a force on the at least one movable member when the object is at least received within the opening." Rather, an operator-activated lever 12a is used to move the gate mechanism 8 of Sakurai from an open position to a closed position.

In view of the foregoing, the combination of Sakurai and Matschke does not teach or suggest the device of claim 25. Withdrawal of this rejection is therefore respectfully requested.

IX. Independent Claim 48

Independent claim 48 was rejected under 35 U.S.C. §103(a) as being obvious over Sakurai in view of Kienemund (abstract of DE 19613560). This rejection is respectfully traversed.

a. There is no motivation to combine Sakurai and Kienemund

There is simply no suggestion or motivation in any of the references to apply the light sensor of Kienemund, which is used to evaluate the integrity of hollow bodies such as tin cans, to the UV sterilizer of Sakurai. Indeed, the only suggestion for using a light sensor as a safety feature in an UV sterilizer comes from *Applicants' own disclosure*, and not from the references cited.

In this respect, Applicants disagree with the statement in the Office Action that "the sensor of Kienemund provides an additional factor of safety for preventing unwanted exposure of radiation to the operator." The method of Kienemund is used to facilitate the detection of faults (i.e., leaks) in hollow bodies (i.e., tin cans). This is done for the purpose of ensuring the integrity of the hollow bodies. The sensor of Kienemund detects light to determine whether the hollow body has been penetrated by the light, and not to prevent exposure of an operator to radiation. Indeed, Kienemund does not disclose any radiation (e.g., ultraviolet light) that would be a danger to an operator.

Further, Applicants disagree with the statement in the Office Action that "Kienemund teaches a light sensor 3 for testing a light seal 4." The shutter 4 is used to seal the hollow body so that it may be tested for leaks. It is the hollow body itself that is tested.

Because the purported motivation for combining the references is not found in the prior art of record, the Examiner appears to be relying on common knowledge in the art or "well known" prior art pursuant to MPEP §2144.03. If the rejection is to be maintained, the Examiner is respectfully requested to cite a reference in support of his position, as required in MPEP §2144.03; or, if the Examiner is relying upon facts within his personal knowledge, to file an affidavit establishing those facts pursuant to §2144.03.

b. The combination of the references fail to teach or suggest each of the limitations of claim 48.

Even if Sakurai were modified to include the light detector of Kienemund (and as explained above, there is no motivation to do so), the combination would not teach or suggest "an actuator to enable light to be output from the ultraviolet light source, the actuator being triggered, at least in part, by the level of external light detected by the light detector." Neither Kienemund nor Sakurai teaches or suggests such an actuator. Kienemund does not teach an ultraviolet light source, and

therefore cannot teach an actuator to enable light to be output from an ultraviolet light source. Sakurai does not teach or suggest any actuator triggered by a level of external light detected by a light detector.

In view of the foregoing, the combination of Sakurai and Kienemund does not render obvious the device of claim 48. Withdrawal of this rejection is therefore respectfully requested.

X. New Claim

Claim 52 has been added to further define Applicants' contribution to the art.

Claim 52 depends from claim 11 and is allowable at least on the basis of its dependency. Claim 52 is supported in the application as filed, e.g., at page 9, lines 4-6.

CONCLUSION

This application is believed to be in condition for allowance. If the Examiner does not believe the application is in condition for allowance, she is requested to call the undersigned at the telephone number listed below.

If this response is not considered timely filed and if a request for an extension of time is otherwise absent, Applicants hereby request any necessary extension of time. If there is a fee occasioned by this response, including an extension fee, that is not covered by an enclosed check, please charge any deficiency to Deposit Account No. 23/2825.

Dated: October 16, 2006

Respectfully submitted,

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